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EXAMINER
SPEARS, ERIC J

ART UNIT	PAPER NUMBER
2878	

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Please find below and/or attached an Office communication concerning this application or proceeding.

KLC

Office Action Summary	Application No.	Applicant(s)
	09/521,618	LEBLANS ET AL.
	Examiner	Art Unit
	Eric J Spears	2878

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133)
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 May 2002* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-37,45-52* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4,7-20,22-37 and 45-50* is/are rejected.

7)☒ Claim(s) *5,6,21,51 and 52* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *8* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Examiner acknowledges the cancellation of Claims 38-44.

Specification

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 32-35 stand rejected under 35 U.S.C. 102(b) as being anticipated by Nakamura et al. (4,450,547).

Regarding Claim 32, Nakamura teaches automatically focusing an image of an object plane in a microscope, comprising: generating an autofocusing light beam 23; directing the autofocusing light beam against the object plane 54 to be examined; reflecting the autofocusing light beam off the object plane (See Fig. 25); directing the reflected autofocusing light beam to a detection system 60; sensing the autofocusing light beam with a light detector of the detection system; determining, based on the sensed autofocusing light beam, the amount of displacement of the image plane of the reflected autofocusing light beam from a desired reference plane (Col. 1, lines 1-14); and focusing on the object plane to create a properly focused image (Col. 9, lines 40-45), wherein said sensing includes transmitting the reflected autofocusing light bear at least partially through an aperture of an iris (20 or 58) and measuring the light intensity of the reflected autofocusing light beam that is transmitted through the aperture with the light detector of the detection system (Col. 9, lines 29-31).

Regarding Claim 33, Nakamura teaches wherein the iris is approximately positioned at the focal distance from a detection system lens and wherein the light detector is positioned adjacent the aperture of the iris (See fig. 25).

Regarding Claim 34, Nakamura teaches wherein the iris is positioned such that it is displaced from the focal distance from a detection system lens and wherein the light detector is positioned adjacent the aperture of the iris (See Fig. 8).

Regarding Claim 35, Nakamura teaches wherein said directing includes reflecting a fraction of the autofocusing light beam via a beam splitter to a second light detector an measuring the light intensity at the second light detector (See Fig. 16).

Claims 45-48 stand rejected under 35 U.S.C. 102(e) as being anticipated by Abe (5,892,622).

Regarding Claim 45, Abe teaches a microscope for viewing an object plane (Col. 4, lines 6-12), comprising: a plurality of lenses 14, 11 positioned along a main optical axis of the microscope; a probe arm 6 supporting the plurality of lenses, said probe arm extending generally along the main optical axis; a support (flat object under 4 shown in Fig. 2) on which an object 4 with an object plane to be examined is placed, the object plane substantially extending along a focus plane that is observed through the microscope (See Fig. 2); and an optical output device (9 or 3) for creating an image of the object plane on an image plane, wherein the main optical axis is unfolded and substantially extends along a single plane.

Regarding Claim 46, Abe teaches further including a second optical axis, the second optical axis being positioned between the focus plane and the main optical axis: the second optical axis being substantially perpendicular to the main optical axis (Axis running between focal point of lens 2 on 4 and beamsplitter 9).

Regarding Claim 47, Abe teaches further comprising a third optical axis being positioned between the main optical axis and image plane in the optical output device,

the third optical axis being configured at an angle relative to the main optical axis (optical axis between the beamsplitter 8 and the output device 3).

Regarding Claim 48, Abe teaches wherein the focusing plane is substantially parallel to the main optical axis (See Fig. 2).

Claims 45, 49, and 50 stand rejected under 35 U.S.C. 102(b) as being anticipated by Muller et al. (5,359,417).

Regarding Claim 45, Muller teaches a microscope for viewing an object plane, comprising: a plurality of lenses (11 (a and b), 12a , 12b, 13a, 13b) positioned along a main optical axis of the microscope; a probe arm 1 supporting the plurality of lenses, said probe arm extending generally along the main optical axis; a support (square base of object 8) on which an object 19 with an object plane 24 to be examined is placed, the object plane substantially extending along a focus plane that is observed through the microscope; and an optical output device 23 for creating an image of the object plane on an image plane, wherein the main optical axis is unfolded and substantially extends along a single plane (See Fig. 2).

Regarding Claim 49, Muller teaches further comprising a scanning stage (flat table-like structure of 8), said probe arm configured to be substantially isolated from vibrations created by the scanning stage.

Regarding Claim 50, Muller teaches wherein the scanning stage and object are positioned on a separate support structure than the probe arm of the microscope, each

separate support structure being substantially vibrationally isolated from each other (See Fig. 1).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 2, 7, 13-16, 18, 22, 23, 25, 26, 30, and 31 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Liegel et al. (5,925,874).

Regarding Claims 1 and 16, Liegel teaches an apparatus for automatically focusing an image of an object plane in a microscope, comprising: an optical system configured to form an image of an object plane to be observe said optical system comprising: an objective lens 1 configured to focus on the object plane 11, and an image lens 3 configured to create an image 35 of the object plane; an autofocusing detection system comprising: an autofocusing light beam source 17 for generating an autofocusing light beam 7, a beamsplitter 21 configured to direct the autofocusing light beam to the object plane and cause the autofocusing light beam to reflect off the object plane, a detection system lens 25 configured to direct the reflected autofocusing light beam to an autofocusing detection device 15, and an autofocusing detection device 15 for determining the amount of displacement of the image of the object plane in the

optical system from a desired focused reference plane based on the detected displacement of an image plane of the reflected autofocusing light beam from a predetermined reference plane in the autofocusing detection system (Col. 2, lines 7-11;Col. 5, lines 28-53), said autofocusing detection device comprising at least one sensor for sensing the reflected autofocusing light beam and detecting the displacement of the image plane 35. Further, Liegel teaches, through US Patent 5,288,987 incorporated into Liegel, a focusing correction system comprising a feedback controller 20 and focus adjusting device 32 for automatically adjusting the distance between the objective lens and the object plane by adjusting the position of the objective lens, based on the reflected autofocusing light beam sensed by said at least one sensor, in order to properly focus the image in the optical system.

Liegel does not expressly teach an illumination beam source for illuminating the object plane with an illumination light beam. However, Liegel teaches an infrared autofocusing light source is preferable (Col. 5, lines 10-18). Liegel teaches the use of video cameras 27, and that the use of visual wavelength (Col. 4, lines 26-31). Therefore, it would have been obvious to one of ordinary skill in the art to provide an illumination beam source for illuminating the object plane with an illumination beam in the device of Liegel, as illumination light sources are well known in the art, in order to provide for color microscopic images of the object plane.

Regarding Claim 2, the modified invention of Liegel teaches the autofocusing detection device further comprises an iris 39 for permitting the reflected autofocusing light beam to pass at least partially through an aperture of the iris, said at least one

sensor measuring the intensity of the reflected autofocusing light beam that passes through the aperture of the iris.

Regarding Claim 7, the modified invention of Liegel teaches wherein the at least one sensor comprises a plurality of diodes for measuring the light intensity and position of the reflected autofocusing light beam on a detection surface (Col. 5, lines 5-9).

Regarding Claim 13, the modified invention of Liegel teaches the feedback controller calculates the displacement of the image from the desired focused reference plane based on the detected displacement of the reflected autofocusing light beam from the predetermine reference plane (Col.1, lines 7-11).

Regarding Claim 14, the modified invention of Liegel teaches the autofocusing detection system is configured so that the measured displacement of the reflected autofocusing light beam from the predetermined reference plane is proportional to the amount of displacement of the image from the desired focused reference (Col. 2, lines 7-11).

Regarding Claim 15, the modified invention of Liegel teaches an infrared autofocusing light beam and a visible light beam (see under Claim 1 above).

Regarding Claim 18, Liegel teaches a system for automatically focusing a microscope, comprising: an imaging system 3. 33, 29, 27 for creating an image of an object plane 35; and an autofocusing detection system, said autofocusing detection system comprising: an autofocusing light beam 7, the autofocusing light beam being directed to reflect off of the object plane 11; an autofocusing detection device comprising an iris 37 and a light detector 15; and a detection system lens 25 for

directing the reflected autofocusing light bear to the autofocusing detection device, the autofocusing detection device receiving the reflected autofocusing light beam from the detection system lens, said iris permitting a least a portion of the reflected autofocusing light beam to pass through an aperture of said iris. and said light detector measuring the intensity of the portion of the reflected autofocusing light beam that passes through the aperture of the iris in order to detect the distance that the image of the object plane in the imaging system is displaced from a desired focus reference surface (Col. 2, lines 7-11;Col. 5, lines 28-53).

Liegel does not expressly teach an illumination beam source for illuminating the object plane with an illumination light beam. However, Liegel teaches an infrared autofocusing light source is preferable (Col. 5, lines 10-18). Liegel teaches the use of video cameras 27, and that the use of visual wavelength (Col. 4, lines 26-31). Therefore, it would have been obvious to one of ordinary skill in the art to provide an infrared autofocus light beam and an illumination beam source emitting at a frequency in the visible for illuminating the object plane with an illumination beam in the device of Liegel, as illumination light sources are well known in the art, in order to provide for color microscopic images of the object plane.

Regarding Claims 22 and 23, the modified invention of Liegel teaches, through US Patent 5,288,987 incorporated in Liegel, a focusing correction system comprising a feedback controller 20 and focus adjusting device 32 for automatically adjusting the distance between the objective lens and the object plane by moving the objective lens,

based on the reflected autofocusing light beam sensed by said at least one sensor, in order to properly focus the image in the optical system.

Regarding Claim 25, the modified invention of Liegel teaches measuring the amount of defocus based on the intensity of light received by the detector 15.

Regarding Claim 26, Liegel teaches a system for automatically focusing an image in a microscope, comprising: an imaging system 3, 33, 29, 27 for creating an image of an object plane 35; and an autofocusing detection system, said autofocusing detection system comprising: an autofocusing light beam 7, the autofocusing light beam being directed to reflect off of the object plane 11; an autofocusing detection device comprising a plurality of light sensors 15 (Col. 5, lines 8-9); and a detection system lens 25 for directing the reflected autofocusing light bean to the autofocusing detection device, the autofocusing detection device receiving the reflected autofocusing light beam from the detection system lens, said plurality of light sensors measuring the light intensity of the reflected autofocusing light beam in order to detect the distance that the image of the object plane in the imaging system is displaced from a desired focus reference surface (Col. 2, lines 7-11; Col. 5, lines 28-53).

Liegel does not expressly teach an illumination beam source for illuminating the object plane with an illumination light beam. However, Liegel teaches an infrared autofocusing light source is preferable (Col. 5, lines 10-18). Liegel teaches the use of video cameras 27, and that the use of visual wavelength (Col. 4, lines 26-31). Therefore, it would have been obvious to one of ordinary skill in the art to provide an infrared autofocus light beam and an illumination beam source emitting at a frequency

in the visible for illuminating the object plane with an illumination beam in the device of Liegel, as illumination light sources are well known in the art, in order to provide for color microscopic images of the object plane.

Regarding Claims 30 and 31, the modified invention of Liegel teaches, through US Patent 5,288,987 incorporated in Liegel, a focusing correction system comprising a feedback controller 20 and focus adjusting device 32 for automatically adjusting the distance between the objective lens and the object plane by moving the objective lens, based on the reflected autofocusing light beam sensed by said at least one sensor, in order to properly focus the image in the optical system.

Claims 3, 4, 8-12, 19, 20, and 27-29 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Liegel et al. (5,925,874) in view of Nakamura et al. (4,450,547).

Regarding Claims 3 and 19, the modified device of Liegel teaches the use of irises but does not teach the particular arrangement. However, Nakamura teaches a focal position detecting optical apparatus wherein the iris 20 is approximately positioned at the focal distance from the detection system lens 2 and wherein the light detector 21 is positioned adjacent the aperture of the iris (See Fig. 16). Therefore, it would have been obvious to one of ordinary skill in the art to provide an iris as taught by Nakamura in the apparatus of Liegel, as the use of irises is well known in the art as shown by Nakamura, in order to detect a shift in the position of the focal point in a continuous way.

Regarding Claims 4 and 20, the modified device of Liegel teaches the use of irises but does not teach the particular arrangement. However, Nakamura teaches a focal position detecting optical apparatus wherein the iris is positioned such that it is displaced from the focal distance from the detection system lens 2 and wherein the light detector 21 is positioned adjacent the aperture of the iris (See Fig. 16). Therefore, it would have been obvious to one of ordinary skill in the art to provide an iris as taught by Nakamura in the apparatus of Liegel, as the use of irises is well known in the art as shown by Nakamura, in order to detect a shift in the position of the focal point in a continuous way.

Regarding Claims 8 and 27, the modified device of Liegel does not teach the particular use of a prism. However, Nakamura teaches a focal position detecting optical apparatus comprising a prism 25 positioned between the detection system lens and the plurality of detectors, said prism configured to divide the reflected autofocusing light bear into at least two separate beams. Therefore, it would have been obvious to one of ordinary skill in the art to provide an prism as taught by Nakamura in the apparatus of Liegel, as the use of prisms is well known in the art as shown by Nakamura, in order to detect a shift in the position of the focal point in a continuous way.

Regarding Claims 9 and 27, the modified device of Liegel teaches the use of light receiving diodes, but does not teach the particular arrangement of the diodes receiving light from a prism. However, Nakamura teaches a focal position detecting optical apparatus wherein a plurality of photodetectors comprise two photodetector pairs, the first detector pair being substantially aligned with a first light beam from the prism, the

second detector pair being substantially aligned with a second light beam from the prism, said detector pairs measuring the intensity of the first and second light beams that strike each detector pair. Therefore, it would have been obvious to one of ordinary skill in the art to provide the prism and diodes as taught in the arrangement of the detectors of Nakamura in the apparatus of Liegel, as the use of prisms and photodetectors is well known in the art as shown by Nakamura, in order to detect a shift in the position of the focal point in a continuous way.

Regarding Claim 10, the modified device of Liegel teaches the first diode pair is located on a first side of the optical axis of the detection system lens and the second diode pair is located on a second side of the optical axis of the detection system lens, the first diode pair comprising a first and second diode, the second diode pair comprising a third and four, diode, and wherein the light intensity measured by the individual diodes changes as a function of the distance between the object plane and the objective lens (See Fig. 17 of Nakamura).

Regarding Claims 11 and 28, the modified device of Liegel does not teach the use of a cylindrical lens. However, Nakamura teaches a cylindrical lens 57 positioned between the detection system lens 56 and the plurality of detectors, said cylindrical lens configured to change the shape of a light spot of the reflected autofocusing light beam on the plurality of diodes when the distance between the object plane and objective lens changes (Col. 9, lines 25-29). Therefore, it would have been obvious to one of ordinary skill in the art to provide a cylindrical lens, as taught in Nakamura, in the apparatus of

Liegel, as the use of cylindrical lenses is well known in the art as shown by Nakamura, in order to detect a shift in the position of the focal point in a continuous way.

Regarding Claims 12 and 29, the modified device of Liegel does not precisely teach a quad photodiode with four distinct segments. However, Nakamura teaches a quad photodetector 60 with four distinct segments 61, 62, 63, and 64. Therefore, it would have been obvious to one of ordinary skill in the art to modify the modified device of Liegel to include a quad photodiode, as such quad photodetectors are well known in the art as shown by Nakamura, in order to detect a shift in the position of the focal point in a continuous way .

Claims 36 and 37 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura et al. (4,450,547).

Regarding Claim 36, Nakamura teaches generating an illumination light beam; illuminating the object plane with the illumination light beam; and reflecting the illumination light beam off the object plane, but Nakamura does not expressly reflecting the illumination light beam off the object plane to create an image of the object plane (Col. 1, lines 4-50). However, Nakamura teaches the use of the invention as an automatic focus adjuster for the optical system of an optical microscope. Therefore, it would have been obvious to one of ordinary skill in the art to provide for reflecting the illumination light beam off the object plane to create an image of the object plane, as it is well known in the art to view an image of a surface using a microscope, in order to provide an auto-focus for a device to image microscopic surfaces.

Regarding Claim 37, the modified invention of Nakamura teaches detecting the amount of displacement of the focal plane of the objective lens from the object plane and creating a reference signal of this displacement. An imaging system as recited in Claim 36, would provide an image which is displaced from a desired image plane when the objective lens is displaced which is used to focus the objective lens. Therefore, Nakamura teaches creating a reference signal representative of the amount of displacement of the image of the object plane from a desired focused reference plane.

Claims 17 and 24 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Liegel et al. (5,925,874) in view of Neumann et al. (4,959,829).

The modified invention of Liegel teaches, through US Patent 5,288,987 incorporated in Liegel, adjusting the position of the object lens to obtain a focus condition by changing the distance between the objective lens and the object plane, but does not teach adjust the position of the object plane in order to properly focus the optical system on the object plane. However, Neumann teaches focusing optical instrument by adjusting the position of the object plane. Therefore, it would have been obvious to one of ordinary skill the art to effect focusing of the modified device of Liegel by changing the position of the object plane, as such focusing means is well known in the art as shown by Neumann, in order to reduce the internal complexity of the modified device of Liegel.

Allowable Subject Matter

Claims 5, 6, 21, 51, and 52 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments filed 5/13/2002 have been fully considered but they are not persuasive.

Regarding Applicant's arguments over the rejections over Nakamura et al. (4,450,547), Examiner maintains that structures such as knife-edges, holes, irises, and apertures are art recognized functional equivalents. Whether or not an opaque stop is composed in the same shape, the effect of blocking different amounts of light depending on its relative distance to a focusing lens would not change. Additionally, the Examiner would like to respectfully point out that in order to measure the difference between the outputs of two detectors, the detectors have to out put a signal based on the intensity of the light impinging on the detectors. Claim 32 does not recite measuring an amount of defocus proportional to the intensity detected by a light detector nor any other direct relation. The claim merely recites detecting an intensity, which the photodetectors of Nakamura do. It should be noted that photodetectors inherently measure an intensity or an amount of light impinging thereon.

Regarding Applicant's arguments over the non-obviousness of the use of illumination, it should be obvious to anyone partially familiar with vision that in order to see an object, light must be reflected or scattered off of it. It is well known to shine light

on an object under a microscope, for example in a high school biology lab microscope. Moreover, the aforementioned patent to Abe (5,892,622) clearly shows a microscope with both an illumination light 10 and an autofocus light 16. Abe states "The optical microscope 1 uses the illumination light, radiated as above, for forming a image of the object 4, condensed by the objective lens2, by the eye-piece 3 and the CCD 9". Thus, Examiner holds that it is well known in the art to illuminate an object with light in the visible spectrum (or whatever wavelength is needed) in a microscope, in order to either merely be able to image an object, or to provide a uniform means of imaging an object regardless of outside ambient light conditions.

Regarding Applicant's arguments regarding the lack of an aperture in the device of Liegel. First, Liegel Figs 2 and 3 clearly shows an aperture through which the autofocus beam emitted by source 17 passes through (Col. 6, lines 26-36).

Regarding Applicant's arguments over the rejection of Claims 45, 49, and 50 over Muller, confusion is apparently derived from an inadvertent typographical error in the non-final rejection. The reference number 7 quoted in the office action was intended to be a number 1. As shown in the referred to figure 2, reference 1 clearly indicates a probe arm along a main optical axis which supports a plurality of lenses as pointed out in the initial office action. Nowhere in the referred to figure 2 does a reference number point out a head stabilizing frame as asserted by the Applicant. Examiner maintains that, together with the rest of the rejection of Claim 45 over Muller, it is quite clear that Fig. 2 shows the recited probe arm, as marked by a slanted number 1, as recited in the claim and explained in the rejection.

Regarding Applicant's arguments over the rejection over Abe, Examiner maintains that nothing in the wording of "A main optical axis" distinguishes the claimed invention of the prior art of Abe. The claim does not recite that the lenses recited take part in magnification.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Spears whose telephone number is (703) 306-0033. The examiner can normally be reached on Monday-Friday from 9:00am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank Font can be reached on (703) 308-4881. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7724.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

EJS
07/26/02

STEPHONE ALLEN
PRIMARY EXAMINER